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APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,204	06/20/2003		Arshad Suhail Farooqui	643-003US	7321
22897	7590	11/20/2006		EXAMINER	
DEMONT (		•	TRA, ANH QUAN		
100 COMMONS WAY HOLMDEL, NJ 07733				ART UNIT	PAPER NUMBER
,				2816	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comment	10/601,204	FAROOQUI, ARSHAD SUHAIL				
Office Action Summary	Examiner	Art Unit				
	Quan Tra	2816				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from 1. cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 03 O	ctober 2006					
_	action is non-final.					
3) Since this application is in condition for allowar		esecution as to the merits is				
closed in accordance with the practice under E						
	n parto Quayro, 1000 O.B. 11, 40	33 3.3. 213.				
Disposition of Claims						
4) Claim(s) 1-8 and 11-20 is/are pending in the application.						
4a) Of the above claim(s) <u>1-6</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>7,8 and 13-20</u> is/are rejected.						
7) Claim(s) 11, 12 is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) acce		Examiner				
Applicant may not request that any objection to the	•					
Replacement drawing sheet(s) including the correct	-···	, ,				
11) The oath or declaration is objected to by the Ex	·	•				
Priority under 35 U.S.C. § 119						
<u> </u>						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents						
2. Certified copies of the priority documents						
<ol><li>Copies of the certified copies of the prior</li></ol>		ed in this National Stage				
application from the International Bureau	` ''					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)	<u></u>					
Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D  5) Notice of Informal F					
Paper No(s)/Mail Date	6) Other:	• •				

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## **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/03/06 has been entered. A new ground of rejection is introduced.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 7, 8, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsay et al. (USP 6127881) in view of Rincon-Mora (USP 6157245) and Rhee et al. (USP 6744712).

As to claim 7, Tsay et al.'s figure 3 shows a circuit comprising an operational amplifier (100, 102, 104, 105, 106, 310), a transistor (118), a voltage divider (210-230), and a self-biasing network (108, 110, 112) connected as claimed. Figure 3 fails to show that circuit, not shown, generating Vref is a bandgap reference circuit, and fails to show a start up circuit directly connected to the input terminal of the voltage divider. However, Rincon-Mora's figure 7 shows a bandgap circuit that generates precision voltage that is independent of temperature. Therefore, it would have been obvious to one having ordinary skill in the art to use bandgap circuit to

generate Vref for the purpose of providing a precision Vref. Rhee et al.'s figure 2 further shows a voltage generator having stat-up circuit (69) directly connected to the input terminal of the amplifier 52 in order to improving the output speed when the circuit is enable. Therefore, it would have been obvious to one having ordinary skill in the art to use Rhee et al.'s start-up circuit for Tsay et al.'s figure 3 for the purpose of improving the circuit speed.

As to claim 8, Tsay's figure 3 shows that the transistor (118) is a PMOS transistor.

As to claim 13, it is inherent that the positive terminal of the newly added bandgap circuit is directly connected to the positive terminal of the amplifier, and the common terminal of the bandgap circuit is directly connected to the common terminal of the amplifier, without the power supply voltage and ground or common voltage, the bandgap circuit will not operate.

As to claim 14, Tsay's figure 3 shows that the common terminal of the of the voltage divider is directly connected to the common terminal of the amplifier.

As to claim 15, the modified Tsay's figure 3 shows that the positive supply terminal of the start up circuit is directly connected to the positive supply terminal of the amplifier.

As to claim 16, Tsay's figure 3 shows that the source terminal of the transistor is directly connected to the supply terminal of the amplifier.

As to claim 17, Rincon-Mora's figure 7 shows that capacitor C3 directly connected between the output of the bandgap circuit and the common terminal.

As to claim 18, Tsay's figure 3 shows capacitor 135 directly connected between the negative input terminal of the amplifier and the common terminal.

As to claim 19, Tsay's figure 3 fails to show a capacitor directly connected between the output terminal of the voltage divider and the common terminal. However, Tsay's figure 2 shows capacitor 206 directly connected between the output terminal of the voltage divider and the common terminal. Therefore, it would have been obvious to one having ordinary skill in the

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art to add a capacitor directly connected between the output terminal of Tsay's figure 3 voltage divider and the common terminal for the purpose of further stabilizing the output of the voltage divider.

As to claim 20,Tsay's figure 3 fails to show a capacitor directly connected between the output of the self-biasing circuit and the common terminal. However, it would have been obvious to one having ordinary skill in the art to add a capacitor directly connected between the output of the self-biasing circuit and the common terminal for the purpose of further stabilizing the output of the self-biasing circuit.

### Allowable Subject Matter

4. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 11 and 12 would be allowable because the prior art fails to teach or suggest that the self-biasing circuit biases the bandgap circuit or the amplifier.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 571-272-1755. The examiner can normally be reached on 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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November 13, 2006